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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Shinsaku Higashi et al.

Application No.: 10/814,603                    Confirmation No.: 5472

Filed: March 31, 2004                          Art Unit: 2123

For:    TEST EMULATOR, TEST MODULE              Examiner: M. C. Jacob
        EMULATOR AND RECORD MEDIUM
        STORING  PROGRAM THEREIN

## INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents                        **22511**
P.O. Box 1450                                   PATENT TRADEMARK OFFICE
Alexandria, VA  22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office

is hereby directed to the references listed on the attached PTO/SB/08.  It is respectfully requested that the

information be expressly considered during the prosecution of this application, and that the references be

made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is, filed more than three months after the U.S.

filing date, OR more than three months after the date of entry of the national stage of a PCT application,

AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the

mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S.

patents and U.S. patent applications.  Applicant submits herewith copies of foreign patents and non-

patent literature in accordance with 37 CFR 1.98(a)(2).

233274-1

A concise explanation of relevance of the items listed on form PTO/SB/08 is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.
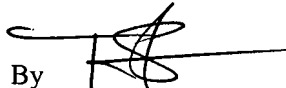
In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.
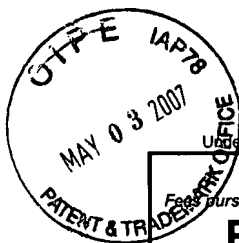
The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 50-0591, under Order No. 02008/105002.

Dated: May 3, 2007                          Respectfully submitted,

By_____
   Thomas K. Scherer
   Registration No.: 45,079
   OSHA · LIANG LLP
   1221 McKinney St., Suite 2800
   Houston, Texas 77010
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   (713) 228-8778 (Fax)

**Effective on 12/08/2004.**
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL
## For FY 2007

☐ Applicant claims small entity status. See 37 CFR 1.27

| | | |
|---|---|---|
| **Complete if Known** | | |
| Application Number | 10/814,603-Conf. #5472 |
| Filing Date | March 31, 2004 |
| First Named Inventor | Shinsaku Higashi |
| Examiner Name | M. C. Jacob |
| Art Unit | 2123 |

| **TOTAL AMOUNT OF PAYMENT** | ($) | 180.00 | Attorney Docket No. | 02008/105002 |
|---|---|---|---|---|

## METHOD OF PAYMENT (check all that apply)

☐ Check   ☒ Credit Card   ☐ Money Order   ☐ None   ☐ Other (please identify): _____

☒ Deposit Account   Deposit Account Number: 50-0591   Deposit Account Name: Osha · Liang LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17

☒ Credit any overpayments

## FEE CALCULATION

### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| Application Type | FILING FEES Fee ($) | Small Entity Fee ($) | SEARCH FEES Fee ($) | Small Entity Fee ($) | EXAMINATION FEES Fee ($) | Small Entity Fee ($) | Fees Paid ($) |
|---|---|---|---|---|---|---|---|
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | |
| Provisional | 200 | 100 | 0 | 0 | 0 | 0 | |

### 2. EXCESS CLAIM FEES

| Fee Description | Fee ($) | Small Entity Fee ($) |
|---|---|---|
| Each claim over 20 (including Reissues) | 50 | 25 |
| Each independent claim over 3 (including Reissues) | 200 | 100 |
| Multiple dependent claims | 360 | 180 |

| Total Claims | Extra Claims | Fee ($) | Fee Paid ($) |
|---|---|---|---|
| _____ - = _____ | | x _____ = _____ | |

HP = highest number of total claims paid for, if greater than 20.

**Multiple Dependent Claims**

| Fee ($) | Fee Paid ($) |
|---|---|
| _____ | _____ |

| Indep. Claims | Extra Claims | Fee ($) | Fee Paid ($) |
|---|---|---|---|
| _____ - = _____ | | x _____ = _____ | |

HP = highest number of independent claims paid for, if greater than 3.
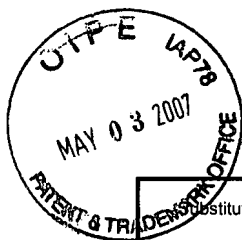
### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee ($) | Fee Paid ($) |
|---|---|---|---|---|
| _____ - 100 = _____ | /50 = _____ (round up to a whole number) x | _____ | = _____ | |

### 4. OTHER FEE(S)

Fees Paid ($)

Non-English Specification, $130 fee (no small entity discount)

Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement — 180.00

## SUBMITTED BY

| Signature | [signature] | Registration No. (Attorney/Agent) | 45,079 | Telephone | (713) 228-8600 |
|---|---|---|---|---|---|
| Name (Print/Type) | Thomas K. Scherer | | | Date | May 3, 2007 |

233276-1

| Substitute for form 1449/PTO | **Complete if Known** | |
|---|---|---|
| | Application Number | 10/814,603-Conf. #5472 |
| **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** | Filing Date | March 31, 2004 |
| | First Named Inventor | Shinsaku Higashi |
| | Art Unit | 2123 |
| *(Use as many sheets as necessary)* | Examiner Name | M. C. Jacob |
| Sheet 1 of 2 | Attorney Docket Number | 02008/105002 |

### U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No.[1] | Document Number<br>Number-Kind Code[2] ( *if known*) | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|---|---|---|---|---|---|
| | AA* | US-2001/016922 A1 | 08-23-2001 | Takasugi et al. | |
| | AB* | US-5,425,036 | 06-13-1995 | Liu et al. | |
| | AC* | US-5,991,907 | 11-23-1999 | Stroud et al. | |
| | AD* | US-6,077,304 | 06-20-2000 | Kasuya | |
| | AE* | US-6,108,806 | 08-22-2000 | Abramovici et al. | |
| | AF* | US-6,202,182 | 03-13-2001 | Abramovici et al. | |
| | AG* | US-2002/0038203-A1 | 03-28-2002 | Tsuchiya | |
| | AH* | US-6,631,487 | 10-07-2003 | Abramovici et al. | |
| | AI* | US-2003/0005375-A1 | 01-02-2003 | Takasugi et al. | |

### FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No.[1] | Foreign Patent Document<br>Country Code[3]-Number[4]-Kind Code[5] (*if known*) | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T[6] |
|---|---|---|---|---|---|---|
| | BA | JP-2000-267881 | 09-29-2000 | Advantest Corp. | . | |
| | BB | JP-2002-141414 | 05-17-2002 | Koninkl Philips Electronics NV | | |
| | BC | JP-2001-522049 | 11-13-2001 | Credence Systems Corp. | | |
| | BD | JP-2001-506367 | 05-15-2001 | Simd Solutions Inc. | | |
| | BE | JP-2001-320386 | 11-16-2001 | Nippon Electric Co. | | |
| | BF | JP-2000-163456 | 06-16-2000 | Hitachi Ltd. | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

### NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No.[1] | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T[2] |
|---|---|---|---|
| | CA | Xia J.Q. et al: "Dynamic Test Emulation for EDA-Based Mixed-Signal Test Development Automation" Proceedings of The International Test Conference (ITC). Washington, Oct. 21-25, 1995, New York, IEEE, US, 21 October 1995 (1995-10-21), pages 761-770, XP000552879 ISBN: 0-7803-2992-9 | |
| | CB | Explanation of Circumstances Relating To Accelerated Examination submitted in Japanese Application No. 2004-380598 dated March 1, 2007 and English translation thereof, 8 pages | |
| | CC | European Search Report issued in European Application No. EP 06 07 7162 dated February 23, 2007, 6 pages | |
| | CD | Castelnuovo A. et al: "Emulation-based Design Errors Identification" Defect and Fault Tolerance in VLSI Systems, 2002, DFT 2002. Proceedings. 17th IEEE International Symposium on 6-8 Nov. 2002, Piscataway, NJ, USA, IEEE, 6 November 2002 (2002-11-06), pages 365-371, XP010625026 ISBN: 0-7695-1831-1 | |
| | CE | Japanese Office Action "Notification of Reasons for Rejection" issued in Japanese Application No. 2004-380598 mailed on April 3, 2007 and English translation thereof, 7 pages | |

| Examiner Signature | | Date Considered | |
|---|---|---|---|

233273

| Substitute for form 1449/PTO | | | | Complete if Known | |
|---|---|---|---|---|---|
| **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** *(Use as many sheets as necessary)* | | | | Application Number | 10/814,603-Conf. #5472 |
| | | | | Filing Date | March 31, 2004 |
| | | | | First Named Inventor | Shinsaku Higashi |
| | | | | Art Unit | 2123 |
| | | | | Examiner Name | M. C. Jacob |
| Sheet | 2 | of | 2 | Attorney Docket Number | 02008/105002 |

| | CF | Dearborn, W.R., Perkins, E.G., Wong, J.J., Rolince, D., The Virtual Test program (VTest), AUTOTESTCON '98. IEEE Systems Readiness Technology Conference, 1998 IEEE, USA, August 27, 1998, pp. 149-159 | |
|---|---|---|---|
| | CG | U.S. Office Action issued in U.S. Application No. 10/404,002 mailed on April 9, 2007, 16 pages | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

| Examiner Signature | | Date Considered | |
|---|---|---|---|

233273

# Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EM 029487377 US in an envelope addressed to:

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA  22313-1450

on _____May 3, 2007_____ .
                              Date

_____
                              Signature

_____Yuki Tsukuda_____
Typed or printed name of person signing Certificate

_____N/A_____          _____(713) 228-8600_____
Registration Number, if applicable                    Telephone Number

Note:    Each paper must have its own certificate of mailing, or this certificate must identify
         each submitted paper.

         Fee Transmittal (1 page)
         IDS (Citation) by Applicant (22 References) (2 pages)
         Information Disclosure Statement (2 pages)
         Payment by credit card.  Form PTO-2038 is attached (1 page)
         Charge $180.00 to credit card
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